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Original Articles

REPORT ON CASE OF HEMATOMYELIA.*

BY THEO. H. ROMEISER, M.D., Belleville, Ill.

THE patient, Fred Ufert, aged 23 years, previous to the accident which brought him to his present condition worked in a glass factory at Alton. He always enjoyed good health and had never anything worse than what from his description was probably malaria; was strong and weighed 141 pounds on the 5th of November, 1897. At 7:30 P.M., while exercising on parallel bars, he lost his balance and fell, striking the mattress on his left shoulder and the side of the neck. Although he retained consciousness, he was unable to rise. Examination showed that he was able to use only his arms, head, and toes of left foot. All of his extremities felt numb and he had lost the muscle sense. He was so weak that he had to be carried home. There was also a severe pain localized at about the third cervical vertebra. Until 10 P.M. (for about 2½ hours), he was able to move his head and upper extremities, after which he is said to have slept until 3 o'clock next morning, when he awoke and was found to have a general paralysis of all skeletal muscles, together with paralysis of bladder and rectum. However he suffered no impairment of speech. Next day, about 3 P.M., he had the sensation of a drop of water trickling down his spinal column (deep in the middle of his back he says). This he felt twice in succession, the drop seeming to stop at the level of the sacrum. On the morning of the second day the skin over the sacrum was found discolored, and by the afternoon of the same day a bed sore formed and rapidly increased in size until it was about as large as a saucer, with a very abundant discharge. There was considerable loss of substance, leaving a hole on each side at the base of the sacrum about the size of a walnut and exposing the bone. It took fully a year to heal, and even now re-opens at times. In addition, four bed sores had developed in the gluteal region and over the trochanters. He suffered from a slight degree of dyspnea. After two weeks he was able to move toes of the left foot, after five weeks the fingers of the left hand, after thirteen weeks the head. Last December he had cystitis for three weeks. Now, after a lapse of one and one-half years, the patient can flex the right forearm completely, the left forearm not so much. For extension it is the converse, for he can extend the left forearm completely, but the right less so. For the hand, flexion of the left is partial, of the right impossible; for both extension is impossible. The patient can flex and extend the left leg slightly, but this is impossible for the right leg. Of the feet, the left alone can be moved. The left hand can be closed, but with grasp too feeble to register on the dynamometer. Of the right hand he can only move the thumb slightly.

At present the patient has a paraplegia with a general muscular atrophy, involving principally the muscles of the forearm and the small muscles of the hand. There is a slight contracture of the flexors of the arms and legs with occasionally marked fibrillary twitching. He is unable to rise or even to stand without assistance, but he can move his head and arms quite freely. A feature of this case is a form of Brown-Séquard paralysis, in which there is motor paralysis of one lower extremity and sensory paralysis of the other. There are also present dissociate sensory phenomena. While the tactile sense is everywhere present, there is anteriorly below level of the fifth rib on left side on the trunk and lower extremities an area insensible to pain, and about corresponding to this area of analgesia there is also therm-anesthesia. Anteriorly above the fourth rib on left side there is an indefinite area showing a reversed type of thermal sensibility. According to his statements at the time of examination, he there felt a cold object as a warm one. Here also with the esthesiometer he felt two points as three, but this was not constant, as often with the same test on the same spot he gave contradictory answers. Posteriorly the anesthesia is not as high as in front. There is a loss of control of the sphincters, both vesical and rectal.

Respiration is chiefly abdominal. All tendon reflexes are exaggerated and ankle clonus is present. Kneejerk is greater on the left side, while ankle clonus is more marked on the right. Plantar reflex is present, while the cremasteric and abdominal reflexes are absent.

The pupillary reactions are about normal. A noticeable difference in the size of the two pupils was on inquiry found to be probably congenital, as the patient

*Read before the St. Louis Medical Society of Missouri, May 27, 1899.

said his left pupil was smaller than right ever since he could remember. The electrical tests, made by Dr. Hermann, show a diminished excitability, but no reaction of degeneration.

PRESIDENT'S ADDRESS BEFORE THE NORTH MISSOURI MEDICAL ASSOCIATION.

By J. D. BRUMMALL, M.D., Salisbury, Mo.

I AM mindful of the high honor you have conferred upon me in electing me your president, and I assure you I appreciate the distinction conferred upon me. I was inspired to study medicine and leave the old farm house and the farm with its arduous labor, not that the field of medicine seemed such an easy one to me, but to emulate and to attain the greatness of our good old family doctor who, in my youthful fancy, had the most pleasant time, was liked by everyone, had not an enemy, and was the grandest man in the whole community. But Taylor has said:

"To Truth's house there is a single door, which is experience. He teaches best who feels the heart of all men in his breast and knows their strength or weakness through his own."

In my feeble way I shall endeavor to serve you as best I can, and I desire to thank the members, and particularly the officers of the Association, for their kind support and assistance. In addressing you I shall not attempt to exhaust any special theme, but shall touch upon several thoughts that may be of some interest to you. It is hardly necessary for me to call the attention of the society-going, journal-reading, progressive physician to the advances made in medicine, yet I deem it proper to mention a few points. We notice in reports that are reliable, and I believe will be corroborated by the observation of the majority of general practitioners, that the prevention of tuberculosis has caused a decrease in the death rate of that dreaded disease and that it may eventually be annihilated. The antitoxin treatment of diphtheria has had, and yet has, its antagonists, who have fought the battle fiercely and strongly against its use; yet it has triumphed and is now recognized as the most rational treatment, the mortality rate having shown a decided decrease wherever it has been used.

"Diseases desperate grown, by desperate appliance are relieved, or not at all." (Shakespeare's Hamlet.)

The serum treatment of pneumonia and typhoid fever is yet in the experimental stage. The Widal reaction is certainly the most constant and reliable sign, if not an absolute test in typhoid fever. The tendencies in surgery are to simplicity of technique and in a measure to greater conservatism; trephining for epilepsy and idiocy are being abandoned; fewer women are being spayed. Asepsis and not antisepsis is now the watch-dog for the safety of the patient. The time to use antiseptics is before the skin is broken, and asepsis afterwards. It is hard to antisepticize the skin of the patient, the lymph spaces of the true skin as well as layers of the epidermis, hair follicles, and sebaceous glands being filled with bacteria; fortunately, however, they are not of a very pathogenic nature. Infection may come from drops of moisture from perspiration or saliva of the operator or assistant; being moist they are more active, while those in dry dust require a period of incubation. Sterilized ligatures inhibit growth of germs that escape the bactericidal action of the primary wound secretion.

The anticipation of obstetric complications reinforces the aseptic wave of that branch of our work, and is only excelled by that knowledge of how to relieve pain and husband the forces that prolong life. At this place I will use the opportunity to speak of two points I deem of great interest to medical science and which I feel the average practitioner rarely gives sufficient thought I refer to pre-natal influence and degeneracy. Too often the child is begotten simply in the gratification of animal passion without the natural parental desire of either parent, and of the mother in particular, who for days, weeks and months, while the fetus is in the primitive developmental stage, is angry with herself, her husband, and every animate and inanimate object. This affects the development of the child, influences cell action and tissue formation, producing a degeneracy of glands and organs, of connective tissue, bone, muscle and nerve. These and allied influences over development may often account for the intellectual weakness and nervousness of the offspring, and the production of that irritability of temper which makes a very unhappy and unpleasant disposition. "But experience joined to common sense, to mortals is a providence." By the proper appreciation of these influences and their results and by informing our patrons of them we, as physicians, may do a great deal toward improving the human race and benefiting the unfortunate.

Milton said, "The childhood shows the man, as morning shows the day."

But I would not have you think that these influences cease at birth; nor would I have you think that their power is beyond the hope of check or control, but, on the contrary, if the parent and physician would properly understand the physical condition and nervous temperament of the child and could surround it with the proper environments of development and education, many of the features of degeneracy might be largely overcome if not entirely obliterated. In fact, science teaches to-day that many hereditary taints may be shackled and subdued, environments may be surmounted, and the young man with ability, with the proper knowledge of himself, and with energy and willingness to toil, may, in spite of pre-natal influence and degenerative tendencies, trample on heredity, overcome environment, forge his way to the front and become distinguished.

"For he who is honest is noble, whatever his fortunes or birth."

It is not heredity of nobility in this day that rates a man's standing, but it is what is his ability, what can he do, and is he willing to do it?

"Let high birth triumph; what can be more great? Nothing—but merit in a low estate"

To the young physician I would say that to this end he will find no stronger inspiration than he will gather by association with the up-to-date physician, the reading of good journals, and the attendance of post-graduate courses, and I would emphasize the attendance of medical societies and commingling with his co-laborers.

"In the world's broad field of battle,
In the bivouac of life,
Be not like dumb, driven cattle,
Be a hero in the strife.

Let us then be up and doing,
With a heart for any fate;
Still achieving, still pursuing,
Learn to labor and to wait."

Notes and Items

A curious epidemic of lead poisoning is reported from Paris. In a quarter of the city sixty-six cases of acute lead poisoning resulted from eating the bread from one bakery. The baker in heating his oven had used wood which contained a large quantity of paint.

The *St. Louis Courier of Medicine* has been revived, under the editorship of Dr C. R. Dudley, in conjunction with Drs. Jos. Grindon, E. F. Smith and W. A. Shoemaker. The first number contains eighty pages of well-selected matter, and gives evidence of a prosperous future.

At the annual dinner of the Harvard Medical Allumni Association, Dr. Wood of Santiago presided. President Elliott spoke of the ease with which endowments in medicine will be secured, owing to the growing confidence of the community of the importance of medical research.

The number of international congresses which will meet at Paris next year, has grown to enormous proportions. Already it is stated that about ninety will be held. In addition to the International Medical Congress, there will be a large collection of special congresses, devoted to the various specialties of medicine.

It is stated that chloroform has been almost entirely abandoned in the Dublin hospitals. General anesthesia is, in almost all cases, first induced by the use of nitrous oxide gas, and is prolonged by the administration of ether. We shall look for the reports of anesthesia by this method, as it apparently promises greater safety than either ether or chloroform alone.

The army surgeons are finding a considerable number of cases of leprosy in Cuba and Porto Rico. Four months ago the San Lazaro Hospital in Havana contained 180 cases; the number now is 370. This remarkable accumulation of cases of leprosy in so short a time would indicate a rather wide distribution of the disease in the Island of Cuba.

According to the *New York Medical Journal*, the Governor of Colorado has abused and insulted the medical profession. The occasion for these remarks is furnished by the veto of the Cannon Practice bill. In the veto Governor Thomas, according to the *Columbus Medical Journal*, rates the medical profession "beneath the quacks, blacksmiths, Christian Scientists, and gamblers."

In England substances which are unfit for food are "denatured." In the case of tea which is so far damaged as to be unfit for food, it is mixed with a small quantity of lime and asafetida, so that its sale as a food is prevented. In this state it is used in preparing caffeine. Denatured tobacco is treated in the same way, and from it washes containing the destructive nicotine are prepared for the purpose of killing vermin.

Michigan has a compulsory notification law applicable to tuberculosis. Recently matters have reached an acute stage, several prominent practitioners having been arrested for failing to comply with the statute. The wisdom of compelling notification of cases of tuberculosis is a matter upon which there can be a wide difference of opinion. It is in effect putting a mark upon these unfortunate invalids, which is of doubtful value in protecting the public health.

The splendid bequest of the late Dr. Calvin Ellis, of $400,000 to the Harvard Medical School, has recently become available. The bequest of Dr. Ellis was made to overcome the inequality of income between teachers of clinical subjects and those who dealt with the less practical side of medical teaching. The first purpose of his endowment was to have the incumbents of the chairs of physiology, pathology, and anatomy, paid adequate salaries, and after that what remained of the income should be devoted to the development of laboratory work and teaching in these branches.

The great increase in special institutions for the care of the insane, epileptic, feeble-minded, blind, and deaf, is gradually creating specialists among nurses. Some are devoting special attention to a certain class, or group, of cases, almost to the exclusion of general work. There is no objection to this, but, on the contrary, there are many advantages. The care of the defective classes, notably the insane, is attended with much difficulty, and requires some special knowledge of the subject; therefore, the creation of a nursing specialty for their care, is justified.

ARTHUR MACDONALD, in a recent number of the *Open Court*, gives a study of Zola's personality. According to this writer Zola is neither epileptic nor hysterical, nor is there the least sign of mental alienation. Although he has many nervous troubles, the term "degeneracy" does not apply to him wholly. Magnan classes him among those degenerates who, though possessing brilliant faculties, have more or less mental defects. It is true, as we have seen, that Zola has orbicular contraction, cardiac spasms, thoracic cramps, false angina pectoris, sensory hyperesthesia, obsessions, and impulsive ideas; his emotivity is defective, and certain of his ideas are morbid; but all this is not sufficient to affect in any appreciable manner his intellectual processes. His strong and harmonious constitution gives him immunity, and his intellect is not contaminated. Toulouse says he has never seen an obsessed person who was so well balanced.

THE Thirteenth International Congress of Medicine will undoubtedly be the largest of the one hundred and more international congresses which are to be held under the patronage of the Paris Exposition of 1900. At the last session, in Moscow, there were over 5,000 members; 7,000 are expected in Paris. The largest hall in the city will be needed for the general sessions. The twenty-three sections into which the congress is divided for working purposes will have at their disposition the halls of the medical, law, and other university faculties, and of various scientific societies. The congress is to last seven days, from the 2d to the 9th of August. The French Committee of Organization has entrusted the work of the Congress in the United States to Prof. Osler of the Johns-Hopkins University. In Paris itself the bureaux of the congress are organized at 21 Rue de l'Ecole de Medicine, with Dr. A. Chauffard as secretary-general. The final programme, comprising the details of the different sections, will form a considerable pamphlet. It will be issued during the coming summer.

D. A. CARMICHAEL, stationed at Honolulu, writes hurriedly under date of June 18, to the Marine Hospital Service, that a Japanese ship, named Nippon Maru, is now quarantined at Honolulu. She was bound for San Francisco and had been detained at Nagasaki on account of a sudden death, which had occurred on board on May 26, which Japanese health officers attributed to the plague. Stuart Eldridge, a sanitary inspector of the Marine Hospital, residing at Yokohama, reports under date of June 8 upon the above death. It was that of a Chinese passenger, a boy thirteen or fourteen years of age. The steamer at the time was just leaving the harbor of Nagasaki. Investigation showed the probable duration of the fatal attack to have been from a half hour to an hour, and the ship's surgeon had seen the boy in apparent good health but an hour or two previously. No unusual or suspicious appearances upon superficial examination were found and the glands were apparently normal. The parents of the deceased gave a history of previous severe attacks of a character suggesting cardiac disease. The officers of the quarantine station removed a gland from each axillary; on the examination of these the disease was pronounced plague, and the disinfection of the ship and of the effects of the passengers was ordered.

TO THOSE of the profession who think that the practice of medicine is gradually falling into disrepute, and that entrance into the profession is achieved with fatal facility, we would call attention to the recent address of Dr. W. H. Wishard before the Indiana State Medical Society upon the peculiarities of practice in that State sixty years ago. He said: "I knew a stonemason who threw aside his tools and entered upon the profession. A blacksmith of my acquaintance laid down his hammer and wrote to his friends that he had purchased Thompson's book and had entered upon the profession of medicine. In two or three years they both returned to their trade in disgust, for want of patronage in their chosen calling. Farmers deserted their occupation to enter the profession. Many of the midwives extended their fields of usefulness from obstetrics to general practice. During the late war I entered the hospital at Corinth, Mississippi, after that city was vacated, and found a dead Confederate, an empty bottle, and a Thompson's Practice. The latter I have kept as a relic of bygone days.

"In 1838 I attended a convention of the Johnson County Botanical Society as a spectator. It was held in a backwoods school-house. I shall not attempt to describe the personnel of that assembly, only to say that those who attended were all well developed physically, and in good health. The larger portion of the assembly was of the female sex. The principal speaker was a local preacher, who grew earnest, but not eloquent, in denouncing the 'calomel doctors,' as he called them. After the society adjourned, his reverence and I traveled the same road home. He knew I was a medical student, and he was on the war-path and anxious for debate. I asked him if his professional associates ('steam doctors,' as they were known) ever gave quinine. He looked at me indignantly, and replied: 'Don't you know that we never give mineral medicines?' I suggested to him that quinine was not a mineral production. He remarked that he understood it was. He was the great mogul, or teacher of that association, and you can well guess what the intellectual status of the rank and file was. Such was the legitimate result of the laws regulating the practice of medicine."

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H. W. LOEB, M.D., ST. LOUIS,

AND

WILLARD BARTLETT, M.D.	W. P. LOTH, M.D.
Y. H. BOND, M D.	F. J. LUTZ, M.D.
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JAS. G. KIERNAN, M.D.	S. I. SCHWAB, M.D.

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All communications should be addressed to
DR. H. W. LOEB, Managing Editor,
3559 Olive St., St. Louis, Mo.

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THE STANDARDIZATION OF DRUGS IN THE FORTHCOMING REVISION OF THE PHARMACOPEIA.

The day of the infusion and decoction is gone, the day of empiricism is beyond recall; still we have some relics of the unreconstructed past in the lack of uniformity of certain drugs which are in daily use. The necessity for standardizing our fluid extracts and similar preparations ought to appeal to every one; yet even in this era of exactness there seems to be some opposition to a system which will perfect the dosage and clarify many cloudy points in our materia medica, to say nothing of the mnemonic aid which such a plan will effect. The medical profession as a unit should join the medical press and the pharmaceutical houses in urging the decennial revision committee to adopt some definite standard.

THE DECIMAL SYSTEM.

The decimal system will doubtless receive greater attention than ever before when the first pharmacopeia of the new century makes its appearance. The awkward system of by-gone ages, chiefly notable for its irregularities in numerical relations, 20, 3, 60, 480, should perforce become obsolete under the influence of a system which contemplates multiples of 10 alone.

Even those who have acquired a knowledge of the dosage of medicines under the old plan can learn the new method within a few days and with very little practice. Thus, since a gram is approximately fifteen grains, in prescribing fifteen doses, the number of grams will be equal to the number of grains per dose. Thirty doses, the number of grams will be equal to twice the dosage in grains; in seven or eight doses, half the number. The following will explain perhaps more clearly: Given the dosage in grains of agents to be used in a prescription as 3, ½, 6 and 30, the prescription should call for the following grams: eight doses, 1.5, 0.25, 3, 15; fifteen doses, 3, 0.5, 6, 30; thirty doses, 6, 1, 12, 60. While this is not absolutely correct, it is sufficiently exact for all practical purposes and suffices for those who have neither the time nor the inclination to learn the decimal dosage.

POISONOUS EFFECTS OF EATING SOUR GRASS.

That the eating of so-called sour grass (sorrel-dock, rumex acetosa) is not as harmless as it is generally considered is evidenced by a case reported by Eichelhorst in the *Deutsche medicinische Wochenschrift*, July 13, 1899. A boy of twelve was brought into the clinic unconscious and unable to react to any external stimulant. The anamnesis showed that the patient, who had been perfectly well up to that time, had been taken violently ill a week previous after eating a large quantity of sorrel dock. Nausea and vomiting with diarrhea had been the first symptoms, which had grown worse and worse until convulsions set in. Examination of the urine showed fourteen grams of albumen to the litre, quantities of blood cells, epithelium and granular and epithelial casts. In spite of the most vigorous treatment the patient died three days after admission. Post-mortem showed the lesions of acute nephritis, confirmed by microscopic examination of the kidneys.

The active irritant to the kidneys in this case is oxalic acid, which is contained in large quantities in sorrel dock. Particular attention is called to this case because the practice of eating the leaves of sour grass is so prevalent.

THE ABDOMINAL BRAIN.

The abdominal brain, which has been perennially exploited for the benefit of the reflex fanatics, actually existed in more than one dinosaur, like the stegesaurus of the American Jurassic. This saurian could support itself on tail and hind-legs, in the usual posture of the kangaroos. The forelimbs had as much freedom of action as the human arm. The fore-paws were provided with five fingers. The large and powerful hind-leg had three toes, covered and protected by heavy hoofs. Great plates, placed in a row, gave its back the appearance of a cock's comb. It had two sets of brains, one in

its skull and another, ten times as large, in the lumbar region. This most remarkable dinosaur was partly aquatic in its habits, but passed much time on dry land. Like the kangaroo, it often assumed an upright position in sitting or walking. With its enormous proportions, strength and the four pair of huge spines in its powerful tail, the stegesaurus must have proved a formidable opponent to any contemporary form of life. Its diet was, however, of soft, succulent vegetation, hence its heavy armament was intended for defense rather than attack. Evolution clearly failed in the experiment of an abdominal brain. A mythical reminiscence of it unfortunately survived to furnish mental pabulum necessary for abdominal surgeons with incoherent logorrheic tendencies.

AIR INFLATION OF THE BLADDER, PRELIMINARY TO THE BOTTINI OPERATION, AS PROPOSED BY DR. BRANSFORD LEWIS.

Anent the discussion of the advisability of adopting this procedure, a letter from Dr. Freudenberg, of Berlin, to Dr. Lewis, appearing in the *Medical Record*, July 1, 1899, is of considerable interest. To Dr. Freudenberg, more than any other, belongs the credit of bringing the Bottini operation into its present favor, as well as of materially improving the instrument.

Before a meeting of the Deutsche Medicinische Gesellschaft of New York, in 1898, Dr. Freudenberg called attention to a feature of the Bottini operation that might prove dangerous—that had proved disastrous, resulting in the death of one of his own patients; that is, when the bladder is empty, with its mucous membrane lying in folds, there is a liability of the heated platinum blade catching such a fold and burning through it, or even through the bladder-wall, resulting in peritonitis, etc.

To obviate this danger, Dr. Freudenberg advised the injection into the bladder of boric acid solution for distending the organ and rendering its folds smooth. Certain experimental work, as well as theoretic considerations, impressed Dr. Lewis with the belief that the fluid would interfere with the working of the cautery; he therefore recommended the use of air instead. He also used it and found it to work perfectly (*Medical Record*, November 12, 1898; *Philadelphia Medical Journal*, December 10, 1898.)

In response to the suggestion, Dr. W. Meyer, of New York, in an able paper in the *Medical Record*, January 14, 1899, objected on the ground of danger from air-absorption through the kidneys, as was reported to have been observed by Lewin and Goldschmidt (*Deutsch. medic. Wochen.*, 1897, Nos. 38 and 52). In addition to the response of Dr. Lewis (*Med. Record*, March 25, 1899), in support of the innocuousness of air-inflation, now comes the clinical evidence in the letter of Dr. Freudenberg as follows:

"In January, 1898, directly after meeting with that unfortunate result from operating on an empty bladder, mentioned in your paper, I conceived the idea of inflating the bladder with air for the Bottini operation and discussed it with my assistants; but in consideration of the well-known experiments of Lewin and Goldschmidt, which you also mention, I lacked the courage to carry the idea into effect. * * * Although I have been much pleased with the results of my operations on bladders moderately filled with boric acid, I have been still better pleased when, by your favor of January, 1899, I received the reprint of your article, and thereby learned that you had not only conceived the idea of filling the bladder with air in the Bottini operation—quite independent of my own—but had even carried it out, and for the first time, in a patient; on which accept my hearty congratulations!

"The better is always the foe of the good.

"After that I operated on my very next patient (on February 7, 1899) with an air-inflated bladder, and have since then operated eight times in the same manner; so that up to now I record nine cases of operations on air-inflated bladders (altogether I have operated fifty-eight times on forty-five patients).

"As far as these figures allow of a judgment, I consider the air-filling of the bladder a further progress in the technique of the Bottini operation. I have never experienced anything unfavorable in connection with it, and I shall, if later experiences do not change my judgment, most likely continue to operate so.

"I may here remark that I fill the bladder with air filtered through cotton, by which process the air is rendered free of bacteria. For this purpose I constructed a little apparatus consisting of a glass tube, conical at one end, with a small piece of rubber tubing attached to the other end. The glass tube is filled to about three-fourths of its length with cotton. The rubber tube is joined to the syringe filled with air, while the conical end is joined by rubber tubing to the catheter; so that the air in the syringe is pressed directly through the cotton filter into the bladder. The apparatus, as well as the catheter, must be sterilized by steam. Yours truly,

DR. A. FREUDENBERG."

From the favorable reports that continue to appear in the journals concerning the Bottini operation, it would seem to be rapidly reaching the stage of a recognized procedure; and anything that increases the simplicity and safety of its technique is certainly commendable. Such patients, being usually of advanced age and much debilitated from the harassing nature of the disease, cannot withstand severe operations, which must be simple and non-depressing to put them within the bounds of expediency.

Society Proceedings

ST. LOUIS MEDICAL SOCIETY.

MEETING MAY 27, 1899, DR. JOSEPH GRINDON, PRESIDENT, IN THE CHAIR.

DR. ROMEIZER read the history of the case of

Hematomyelia.*

DISCUSSION.

DR. N. B. CARSON: The symptoms of such cases as described by Gowers are as follows: "The onset is sudden; paraplegia with motor and sensory paralysis up to level of lesion, with loss of sphincter control and paralysis of the bladder and rectum, with localized pain at point of hemorrhage not extending along the spine in spinal, subdural or meningeal hemorrhage. If cervical, all limbs are powerless. If tendon reflex is at first abolished, it quickly returns exaggerated. Vasomotor and atrophic skin changes with muscular atrophy are marked in most cases." That symptom or sensation of trickling, extending down the spine, I have not seen given in the literature at my command. As to the pathology, I will say that at one time the possibility of hemorrhage occurring in the upper part of the cord, was considered doubtful, at least in the cervical region; but that has been proven to be a mistaken idea by many postmortems which have been made. The clots or extravasation generally appears opposite the fifth cervical vertebra in the gray matter, and generally it is columnar, extending up and down, or corresponding with the length of the cord, though sometimes it appears as a decided clot, causing bulging at that site. Again, it may rupture through the medulla and extend along the cord. This, however, is given as a condition that is very rare. The pain, when the medulla is affected, is confined to the region in which it is localized; when it is meningeal, it may extend the entire length of the spinal canal or cord. It produces changes, softening, etc., in the spinal marrow, which we also find in other forms. In this case, upon examination, we find apparently no injury of the atlas or axis, but the spinous processes of the third and fourth cervical vertebræ seem to be deflected to the left. The diagnosis here is a fracture of the cervical vertebræ and deflection of the spinous processes of the third and fourth cervical vetebræ, with extravasation into the cord. The case seems to be progressing favorably. As to the treatment, I should say, let it alone.

DR. BLISS: I take it that the practical point in a case of this kind would be the question as to operation at the time of the injury. I have had no experience in this class of cases but in looking over the literature I find that the majority of the men who have had such cases, the most notable being Barker, who has had 32 cases, are of the opinion that if anything is to be done, it should be done at the time of the injury; the point arises as to whether we have a crushing injury which would not be relieved by operation, or an injury that did not destroy the parts so that it might be relieved. A careful search of the literature did not enable us to discover anything by which we could differentiate this point. There are cases that are spontaneous. Gowers thinks that there is a softening preceding the hemorrhage, while other observers believe that the hemorrhage is sometimes primary and the softening is secondary. It has been said that a displacement of the third and fourth vertebræ or displacement of the atlas might be recognized through the pharynx. I did not examine this man's pharynx.

DR. HERMAN: Through the courtesy of Dr. Carson and Dr. Romeizer I had the privilege of examining this man electrically, in order to determine whether there was any reaction of degeneration. I found that nowhere could we determine any reaction of degeneration. On the contrary, the muscles all responded in a mormal way. There was some diminished irritability. In this case I do not think that the peripheral nerves were affected, except perhaps through pressure. We might reasonably expect that the nerves which issue from the cervical spine at that point would have been injured or pressed upon by the hemorrhage or by the direct injury. There seemed to be a deviation of the second and third cervical vertebræ. I examined the pharynx, but did not find any deviation. One can very easily detect a deviation in this way. In this case there is a decided prominence of the vertebræ or some change from the normal appearance. There was also decided symptoms of a Brown-Sequard lesion—muscular weakness on the right side; his pressure of the hand was diminished; the strength of the right lower extremity was decidedly weaker than the left, and the sensibility was lessened and weaker on the left side. Above the line of the nipple it seemed to me there was a distinct hyperesthesia on the right side. As to the exact pathologic change that has taken place, that can not be fairly determined, but certain it is there was a hemorrhage and myelitis, possibly more on one side than the other, developed. I regard the case as doubtful.

DR. CARSON: You found that one part of the left foot was hyperesthetic also.

DR. HERMAN: I do not remember that now; it may be so. As for the prognosis, it is not good as to complete recovery.

DR. A. V. L. BROKAW: I am very sorry that I can not throw much light on this case. I made a radiograph, but you know that at best it is nothing more than a shadow, and when one attempts to take a picture of the upper cervical vertebræ we are at once confronted with various shadows that come from the opposite side. But in looking at this radiogram it represents an abnormal condition; there is an irregu-

*See page 101, this number.

larity about the transverse processes of the first cervical vertebra. As to whether that be some direct lesion, I am not prepared to say. At any rate, from the little light that is thrown on the case by the radiogram, I for one would not feel justified in operative interference, at least not at this late day. Such a radiogram possibly, if taken immediately after the accident and showing this peculiar irregularity, might have been more significant. I have brought down a radiogram showing the normal cervical vertebræ made by Lynne Bredell of Milwaukee, which represents the highest type of radiographic art; the difference between the two is quite noticeable. A close examination reveals that these vertebræ, especially the third, show thickening. I believe there is a lateral deviation of these bones, and there is possibly some slipping to one side or other of the cartilage together with the fracture of the transverse process of the first cervical. I believe it is generally accepted that the spinal marrow—the cord—cannot become normal.

DR. FRENCH: I think it is well established in the minds of most surgeons, that most of the serious injuries above the fourth cervical vertebra have been rapidly fatal. I think that the majority of injuries in the cervical region are of the fifth cervical vertebra. The two portions of the spinal column most frequently injured are, because of their mobility, the cervical and lumbar. Except in cases of direct injuries to the spinal column, nearly all of the injuries inflicted are due to extreme flexion. I think there was a fracture in this case, but I doubt exceedingly whether the fracture is above the fourth cervical vertebra. In fact the involvement of the muscular structures, the behavior of the nervous system, is such as can be accounted for by a fracture about the fourth or fifth cervical vertebra. I believe very little in dislocations of the spinal column in any portion unaccompanied by fracture. I fully agree with Dr. Brokaw, that the case is hopeless. These cases generally die from septic infection. I am inclined to think that these operations are deferred too long. Nearly all good results have been in cases where the operation has been done immediately after the injury.

DR. MCCANDLESS: Dislocation does occur in the first vertebra; there is sufficient evidence to convince us that such dislocation does occur without the death of the patient, though it is true that they are rare. We know that as a general rule they are rapidly fatal. But dislocations further down are more frequent and have been very well authenticated. I have never seen a fracture higher up than the third or fourth vertebra. I had a specimen which I kept for a number of years where a fracture had occurred and the man lived eight weeks, and, while there were some bedsores on the gluteal region and over the sacrum, the man died, not from septicemia, but from a trouble that occurred in connection with the cord; the paralysis gradually increased, it extended upwards and downwards, and we could see it day by day ascending, and finally the man died as it seemed by a paralysis of the fifth nerve as it reached the point where it interfered with diaphragmatic respiration. The cases that have come under my observation, of injury to the cord, have been generally due to extreme flexion. The first case that I mentioned tonight was a man who got under a hand-car; he slipped off the car in front and his neck was bent and fracture occurred in the fourth and fifth cervical vertebræ and I am not sure but that the fracture extended into the third. There was no pressure upon the cord from displaced bone, but there was an injury to the cord from the injury which he sustained. I believe, therefore, that whatever is done must be done immediately. Evidently in this case the cord was not torn through; there must have been extravasation into the cord or about the cord, and then secondary changes took place. I do not believe there is any pressure from bone, otherwise there would have been complete paralysis from the beginning, and there would not have been any return of sensation below the point of injury. I therefore think it was due to extravasation, and there might possibly have been something done if it had been done immediately.

DR. FUNKHOUSER: I have seen cases in which there was a fracture and pressure upon the cord from a clot. My cases have been fatal in from twenty-four hours to three days. We must necessarily work in the dark in attempting to operate, even if we see the case immediately after the injury; in many cases I think the death of the patient will be hastened by operation.

DR. FRENCH: It has been the impression of some members of the profession that in such cases as this, where there is pressure from blood clot on the cord, there will be immediate relief even after a very considerable injury has been done to the cord if the pressure is removed, etc. I wish to call attention to the fact that it requires a long time for the regeneration of the nerve structures even when a successful operation is done. I have seen a good result occur eighteen months after the operation; there was gradually a union of the nerve structures and regeneration of the injured nerve, but it required a long time.

DR. CARSON: Until recently it was thought that injuries to the cervical vertebræ, first, second and third, were necessarily fatal. However, within the past few years there have been a number of cases by which this has been disproved. These cases, while they are very frequently followed by fatal results, are not all fatal, some few of them have recovered. In this case I take it that we had an extravasation into the cord and that it was below the arm centers, as these did not become involved until later—not for some hours after the receipt of the injury; and it is probable that there was bleeding which extended up the cord, and clots formed until it reached the centers which control the upper extremities, which finally became paralyzed. Now I do

believe that this injury at least involves the fourth cervical, but it is above the fourth cervical; it involves possibly the second and, I am quite sure, the third. There are, as I have said before, some symptoms in this case which I have not seen mentioned in any of the literature that I have had an opportunity to examine. Then again, as to injuries of the spinal cord, if anything is to be accomplished it must be done early—soon after the receipt of the injury. After inflammatory changes have taken place we can not expect a restoration of the functions. I remember one case that I reported to the Medico-Chirurgical Society some years ago, in which a man was driving under a doorway in one of the sale-stables in the northern part of the city, and he was caught and bent over about the seventh cervical vertebra; there was a decided dislocation of the lower lumbar vertebræ and a part of the body was totally paralyzed. The dislocation was such that I could put two or three fingers under the projecting spinous processes. I saw him at once and had him brought to the hospital, and we explained the situation to him and suspended him in a Sayre's apparatus. I immediately reduced the dislocation and the shock was so decided that he lost consciousness. We were prepared for such a situation and immediately lowered him upon a bench and placed a bandage to the back to prevent a re-dislocation and to make extension. We applied stimulants and restored him to consciousness, and applied immediately around his body a plaster jacket. The case progressed favorably. It was very interesting to watch the restoration of the functions of the different parts. Another case very similar to this entered the hospital a few weeks afterwards, where the dislocation had existed for some time and the pressure upon the cord had existed for several weeks. Here inflammatory changes in the cord had taken place, and, although we succeeded in reducing the dislocation as perfectly, apparently, as we had in the other case, the result was a total failure. The patient died, not as Dr. French suggested, from septic infection or septicemia, but from an extension of the disease up and down the cord. Here are two cases that show very prettily the good results to be attained from treatment immediately following the receipt of the injury, and in the other a failure on account of the alterations or changes that had taken place in the cord from pressure.

The question of dividing medical fees between the referring practitioner and the consultant, is one that has met with considerable discussion pro and con. Recently the *Maryland Medical Journal* comes out editorially, condemning the practice. It says:

"There is a tendency at the present day to put too much stress on the business aspect of medical attention, and while the physician should demand pay for his services, and receive it, that part of the work should not be made too prominent."

Current Medical Literature

DERMATOLOGY AND GENITO-URINARY DISEASES.

Horseshoe Kidney.—D. E. Hills* found a horseshoe kidney in a woman 45 years old, well developed and of previous good health, who committed suicide by taking "Rough-on-rats." The kidney lay at the normal height, close to the spinal column and equidistant from it on each side. The pelves were distinct and the connecting band true renal tissue; the pelves and ureters were normal. The convexity was downward; there was acute congestion from the effects of the poison; its weight was 14 ounces.

Nephro-Ureterectomy for Traumatic Hemato-Hydro-Nephro-Ureterosis.—J. H. Summers† reports a case of injury which necessitated the carrying out of this operation. The patient, a woman 38 years old, fell so that her right side struck against the edge of the sidewalk; the next morning she passed a large quantity of bloody urine, there was slight rise of temperature, a tumor could be seen in the right lumbar region, painful on palpation and of boggy feel. When seen two weeks later a cystic growth occupied the lower median part of the abdomen, distending the right side, extending to the kidney region; passing of bloody urine continued; it was found impossible to isolate the ureter after exposing the tumor; the tumor was reduced in size by the removal of many quarts of bloody fluid, and the ureter was then found distended and thickened; both the tumor and ureter were removed, the entire operation being extra-peritoneal, and the patient made a good, though slow, recovery. On examination of the tumor, all semblance of kidney tissue had disappeared, and there was no trace of pyramidal or cortical substance.

Exstrophy of the Bladder—Operative Treatment, with Special Reference to Maydl's Operation.—R. Matas‡ summarizes his impressions as follows: 1. All autoplastic methods proposed for the cure of exstrophy of the bladder are unsatisfactory, and, at best, simply palliative. 2. Of all the radical methods which involve an excision of the bladder and a transplantation of the ureters to the rectum, Maydl's is by far the most complete, rational and satisfactory from the technical point of view. 3. Maydl's operation offers the best conditions for the complete correction of the associate epispadias. 4. Notwithstanding the large number of successful cases accredited to this method, its relation is not yet fully ascertained, though the ratio, as obtained from published cases—over 13 per cent.—establishes its superiority from the prognostic point of view. 5. It is a diffi-

*Phila. Med. Jour., July 22, 1899.
†N. Y. Med. Rec., July 29, 1899.
‡Jour. Am. M. A., July 29, 1899.

cult, laborious, and in many respects a dangerous operation and should only be undertaken by those who have thoroughly familiarized themselves with its difficulties by special training in abdominal surgery, supplemented, if possible, by experimental work. 6. It should not be applied indiscriminately to all cases, but only to those patients whose general condition is such as to warrant a long, tedious operation likely to be attended by serious shock, and whose eliminating organs, especially the kidneys, are normal and capable of effective elimination.

Exstrophy of the Bladder.—D. P. ALLEN,* after speaking briefly of the various operations which have been introduced for the relief of this malady, describes the method employed by himself in a case reported; it consisted in the removal of all of the exposed mucous membrane of the bladder excepting that which is immediately around the openings of the two ureters. The abdomen was then opened, the ureters made fast by a series of sutures to the sigmoid flexure, their mucous covering being inserted into the sigmoid; the abdominal cavity was then closed. To insure free escape of the urine through the bowels, the sphincter ani was stretched and a drainage tube was carried well up into the rectum; one month later the patient was discharged, in excellent health, and having had no irritation from the retention of urine in the large intestine; he retained it without difficulty during the day, from four to five hours, and during the entire night. The method was first described by Maydl of Prague.

A Report of Twelve Cases of Prostatic Hypertrophy Benefited by the Bottini Operation —R. GUITERAS† reports twelve cases in detail; the patients ranged in age from forty-nine to seventy-nine years, and all showed marked improvement after the operation. The indications for this operation are frequency of urination with the presence of residual urine, an increasing amount of residual urine, a troublesome cystitis, retention associated with catheter life when tenesmus and irritability are so great that catheterization and irrigations do not relieve and when catheterization is followed by bleeding and bad cystitis. When the kidneys are in bad condition an operation should not be looked upon favorably; it is advisable to put the kidneys and bladder in the best possible condition first by the administration of diluents, internal urinary antiseptics and bladder irrigations. It is better to give a general anesthetic, of which nitrous oxid gas is preferred, being attended with no danger and having no appreciable action on the conditions of the kidneys. The preparation of the patient and the steps in the operation are described. The good effects are produced in two ways—by making a furrow through the gland, lowering the height of the dam, and by cutting through the blood vessels and searing them so that the blood supply to the gland is cut off and atrophy is induced. Of all operative procedures so far devised for the treatment of prostatic hypertrophy this is the one which exposes the patient to the least danger and is attended by the best results.

*Jour. Am. M. A., July 29, 1899.
†N. Y. Med. Rec., July 29, 1899.

DISEASES OF CHILDREN.

The Question of Gruels in the Feeding of Infants.—H. D. CHAPIN.* The principal trouble in substitute infant feeding lies in the difficulty many infants have in digesting the casein of cow's milk, even when reduced to the same proportion as in women's milk. The best method of acting on the casein of cows' milk, in the way of attenuating and modifying the clot, is by properly diluting the milk with a decoction of the cereals. From a series of comparative tests, it was found that a solution of cow's milk diluted with an equal quantity of barley water, to which rennet was then added, resulted in the formation of smaller, more flocculent clots, which were more readily acted upon by artificial gastric juice than solid, large and tough clots, which resulted from the action of rennet on plain cows' milk and cows' milk diluted with water. Experiments upon a healthy dog with a gastric fistula that had been produced for the purpose, showed that the curds were fairly fine and apparently partially digested half an hour after the administration of the milk and barley-water. Besides attenuating the casein, the addition of gruel increases the nutritive value of cows' milk. Any disadvantage in the employment of wheat or barley-flour from the starch contained in them in very young infants may be easily overcome by dextrinizing the gruels by the addition of diastase. In average cases, and if the bowels tend to looseness, wheat or barley-flour may be used. When there is constipation oatmeal had better be employed on account of the fat it contains.

Summer Diarrhea of Infants.—H. M. MCCLANAHAN† discusses the etiology and treatment of this affection. The etiologic factors he divides into predisposing and exciting. The former are age, environment, season, character and method of feeding, and previous condition of health, none of which, however, nor even altogether, in the true sense of the term, causes the disease. It is an infectious disease, which is, however, not due to only one specific germ. The method of invasion is nearly always by the food through the gastro-intestinal tract. The poison originates in the milk, through the agency of bacterial growth. The first and most important principle of treatment is to stop the milk and all other

*N. Y. Med. Rec., August 5, 1899.
†Jour. Am. Med. Assn., August 5, 1899.

kinds of food. The next object is to unload the intestinal tract as completely as possible. The mechanical means employed are lavage of the stomach and irrigation of the bowels. Calomel is the best remedy to unload the small intestine, and should be given hourly until the typical discharges are produced. When milk diet is resumed it should be thoroughly sterilized and properly diluted.

The Death-Dealing Long-Tube Nursing-Bottle.—E. WENDE.* The object of this paper is briefly to give the perilous and untrustworthy features of the so-called long-tube nursing-bottle, and to show justification for not only interdicting it, but doing so by law. The peculiar features of danger from its employment may be summarily stated, that owing to its construction and material and to the use to which it is put, probably no better incubator of pernicious micro-organisms and their toxins could be easily designed, as none have proven so successful. A series of investigations was made, microscopically, bacteriologically and chemically, establishing beyond question the danger of these tubes for the introduction of pathogenic microbes into the infantile economy.

Causes, Diagnosis and Treatment of Hip Disease.—VANCE† concludes that all cases not syphilitic are tuberculous. One of the earliest symptoms—often antedating pain for a long time—is a slight limp. When all of the classic symptoms are present the diagnosis is easy, but many cases go unrecognized. A blister will often help to clear diagnosis and can never hurt. As regards treatment, the author thinks the ideal method is rest in bed, with extension, weight and pulley, for a period of two years. On account of difficulty in carrying this out in practice, various kinds of fixation splints have been recommended, and the author has had good results with his own modifications of the Lorenz splint. Excision of the joint the author considers only rarely justifiable. Cold abscesses should be aspirated. The chance of disseminating the tuberculosis is in direct proportion to the activity of the surgical interference.

Calomel in Diphtheria.—L. D. JUDD‡ advocates the fearless use of calomel in pronounced diphtheria; he cites two cases, a brother and sister, six and ten years old respectively; both exhibiting a malignant form of the disease; a five-grain dose of calomel was given to each, followed every twenty to thirty minutes with half a grain; the nostrils were sprayed with a solution of the calomel triturates in warm water; the half-grain doses were given for thirty-four doses, then one-sixth of a grain for twenty-four hours, and then smaller doses till the disease was conquered. Both made good recoveries and showed no mal-effect from the calomel. Faithful and intelligent nursing is, of course, required. He has employed this method of treatment in many cases and without any deaths. In the same cases it is necessary to push the treatment until the characteristic dejection occurs; by this he means movements from the bowels that have the appearance of "frog spittle" and copious like that of the green polyps observable in an old water-trough; a copious "frog-spittle" stool is necessary to prove that the limit is reached.

*Jour. Am. M. A., Aug. 5, 1899.
†Pediatrics, July 15, 1899.
‡N. Y. Med. Jour., July 22, 1899.

EYE, EAR, NOSE AND THROAT.

Membranous Laryngitis.—G. B. KALB* reports the results of his experience with the use of antitoxin in this affection; previous to its use his mortality was 84 per cent.; since the introduction of antitoxin he has used it in 16 cases, 9 of which were intubated; one of these died with and one without intubation, a mortality of 12½ per cent. The use of antitoxin was practically the only point of difference in treatment. He injects at least 2000 units near the angle of the scapula as soon as the diagnosis is made; if the stenosis is marked a tube is at once inserted, never waiting until cyanosis sets in and until the child's vitality is thereby lowered. The tube is removed in 48 hours. Calomel is given to all cases; strychnine and alcohol when indicated. The points emphasized are: (1) to give antitoxin early and in large doses; (2) to intubate early and remove the tube early.

Noma.—PASSINI and LEINER† report a case involving face, palate and pharynx in a tubercular child. Bacteriologic examination (cultures and animal experiments) demonstrated the presence of the bacillus of diphtheria in the gangrenous tissue. Treatment with antitoxin, which has been of benefit in several cases of noma, was of no avail, because of the cachetic condition of the child. Authors conclude that most cases of noma have some form of organism as the direct cause—the Loeffler bacillus being a very frequent one.

Modern Therapy of the Tympanic Cavity.—M. A. GOLDSTEIN.‡ The otologist is inclined from time to time to institute radical measures where a more conservative treatment may be indicated, and the results obtained be equally satisfactory; in chronic suppurative conditions of the tympanic cavity the radical otologist frequently promotes unfavorable results. Attention is directed to the milder measures which should be given a fair trial. He favors the "dry treatment" in these affections, the object being to extract fluid from the tympanic cavity, and not to add to the already existing serous or purulent infiltra-

*Phil. Med. Jour., July 8, 1899.
†Weiner Klinischer Wochenschrift, July 13, 1899.
‡N. Y. Med. Jour., July 29, 1899.

tion. He is opposed to the use of the middle-ear syringe in any affections of the tympanum other than in mild cholesteatoma, where an alkaline antiseptic solution is frequently effective. The use of the medicated liquid petroleums is advocated in the treatment of chronic non-suppurative middle-ear catarrh of the hypertrophic form, and in mild sclerotic otitis media; the method of application is described fully, together with various other modes employed in the treatment of other affections. A brief report is given of the results obtained from the use of ferments employed to dissolve fibrinoplastic deposits and fibrous adhesions in the middle-ear cavity, and of the therapy employed for the relief of tinnitus aurium.

Treatment of Acute Otitis Media Following Influenza.—THEOBALD* recommends the use of atropine in the early treatment of otitis media. An aqueous or oily solution of atropine $\frac{1}{2}$ gr., and cocaine gr. j. to the drachm is used. Eight drops of this solution, representing $\frac{1}{15}$ of a grain of atropine, three to four times daily are dropped into the ear. Should there be a perforation of the tympanic membrane, absorption may take place too rapidly and thus produce toxic symptoms. Allowances in amount must be made under these circumstances. Small doses of calomel are given every hour until free catharsis is produced. Should this method not prove successful within a reasonable length of time, incision of the tympanic membrane is advised.

Otitis Media and Earache in Lobar Pneumonia of Children.—J. S. MELTZER,† in a detailed consideration of this question, brings out the following points: 1. Otitis media is an extremely frequent disease in children, especially in poorly-nourished ones. 2. Broncho-pneumonia is very frequently complicated with otitis media. 3. In lobar pneumonia of children purulent otitis media is at least very rare, possibly because the pneumonia by its hyperleukocytosis acts as a derivative upon the otitis. 4. Many cases of lobar pneumonia begin with an earache which disappears gradually. 5. The hypothesis is offered that possibly this is only a sympathetic pain of the chronically-inflamed drum. 6. In offering this hypothesis the idea is introduced of a summation within the central organ between the effects of an abrupt and of a continuous stimulus; a conception which might prove to be fruitful in pathology, in which all the chronic and many acute inflammations are the seat of such continuous nerve-stimulations.

GYNECOLOGY AND OBSTETRICS.

Spontaneous Rupture of the Uterus.—THOMSON and SCHWARTZ.‡ Microscopic examination shows decided changes in the elastic and muscle fibres. The former seem to have undergone atrophy, and are present in very small numbers, while the latter have undergone hyalin changes. The changes in the elastic tissue seem, however, to be paramount. In the case reported laparotomy was done, with the supravaginal amputation and application of the elastic ligature. This is the quickest and most satisfactory method in all cases. Though the operation was done under the most unfavorable surroundings, viz., in a hovel, and the patient almost moribund, the outcome was a most gratifying one.

Ophthalmia Neonatorum.—POUKALOFF* recommends the use of calomel instead of nitrate of silver in the treatment of above disease. He proceeds as follows: Wash out the eye thoroughly with a two per cent. solution of boric acid; dry well, and dust calomel over the cornea and inner surfaces of both lids, which should be well everted for this purpose. In very severe cases use, in addition, compresses of a one per cent. solution of sodium chloride. This treatment should be repeated two or three times a day and persevered in until the lids do not adhere in the mornings. Then begin the use of the ordinary astringents recommended in this disease. An improvement, as shown by a diminution of the secretion and of the edema, will be noticeable in 24 hours, even in severe cases. There are no dangers to fear from this treatment, as the more calomel dusted the better for the little patient; this is undoubtedly a decided advantage in country practice. When the treatment is begun early, recovery takes place in seven days; if the case is very severe, or the treatment is begun late, it may take fifteen days. This report is based on the study of 57 cases, where the gonococcus was found in the pus.

A Case of Repeated Fundal Cesarian-Section.—H. LUDWIG† has operated on two such cases. In one patient the first operation was performed on the 12th of January, 1898, and a second on the 8th of June, 1899. A small portion of the omentum was found adherent to the uterine scar. The author praises Fritsch's operation highly, the principal reason for so doing being that in fundal Cesarian-section the laparotomy wound is above the umbilicus, and the danger of hernia in consequence very slight.

A Contribution to the Study of Menstruation and Pregnancy in Nursing Women.—S. M. BRICKNER‡ shows that menstruation and ovulation, as well as pregnancy, are not only possible to a nursing woman, but are commoner than is usually granted. In an examination of 442 nursing women 191 had menstruated, a percentage of 43.3. The menstru-

*Johns Hopkins Hospital Bulletin, July, 1899.
†Phila. Med. Jour., August 5, 1899.
‡Centralblatt für Gynäkologie, July 15, 1899.

*La Presse Medicale, June 24, 1899.
†Centralblatt für Gynäkologie, July 8, 1899.
‡Phila. Med. Jour., Aug. 5, 1899.

ating women had the first appearance of the flow in every month from the second to the twelfth after delivery, the greatest number occurring in the seventh, eighth and ninth months. Of the menstruating women, 26, or 13.6 per cent. were found pregnant; of the nursing women, 6 per cent. These women conceived in every month after confinement from the second to the twelfth; the greatest number in the ninth month; the next greatest number became pregnant in the sixth month. The practical bearing of the investigation lies in a consideration of the influence of the milk of a menstruating woman upon the child, the effect of pregnancy upon the milk and the child at the breast, and the result of nursing upon gestation.

The Etiology of Eclampsia and the Diagnosis of Impending Eclampsia.—Davis* takes up in detail the different theories which have been presented as to the etiology of eclampsia, and after a thorough consideration of each returns to the old accepted theory of toxemia. Although the exact toxic agent has not been determined, experimenters have found that during eclampsia little, if any, of the usual toxic elements are found in the urine, while the blood serum is loaded with them. The author concludes that the diagnosis of toxemia is made by studying the action of the excretory organs. Especial care must be directed to the functions of the liver and intestines. As regards the examination of the urine, the quantity, its specific gravity, the amount of urea, the presence and character of sediment, are important.

Plastic Closure of a Ventral Hernia by Means of a Myomatous Uterus.—The hernia in this case of Stratz† had resulted from a laparotomy for pyosalpynx. The uterine tumor, together with coils of small intestine, protruded. After opening the peritoneal cavity the intestinal coils were pushed aside and the edges of the parietal wound firmly sown to the uterine tumor. Patient left her bed in just two weeks completely cured. The operation, however, was of lasting benefit. In consequence of a unilateral castration, which the author was obliged to make, atrophy of the uterine tumor took place, with the result that a deep retraction ensued in the area where the hernia had formerly been.

The Uterus: Spontaneous Rupture of Its Body During Labor.—H. D. Ingraham.‡ The scope of the article is to deal especially with those ruptures which have been designated as spontaneous. Seven cases are reported in detail, an analysis of which shows that both mother and child died in all the traumatic cases, while in the spontaneous variety this mortality was 86 per cent. of the mothers and 71.5 per cent. of the children; also that rupture occurs more frequently in the foreign-born than in our native population. Only two of the cases reported were born in this country, and the birth of one of them was soon after her people came here. This is partially accounted for by the fact that a large proportion of the foreign-born population employ midwives. Another probable cause is the greater frequency of contracted pelves among the foreign-born element.

*American Gynecological and Obstetrical Journal, July, 1899.

†Centralblatt für Gynäkologie, July 8, 1899.

‡Jour. Am. Med. Assn., July 29, 1899.

INTERNAL MEDICINE.

Prophylaxis of Pulmonary Tuberculosis.—E. Barth* thinks that pulmonary gymnastics should play an important role. Pulmonary tuberculosis nearly always begins in the apices, because, for anatomic reasons, less air reaches these parts of the lungs. Flat chest walls are predisposing causes, because with them deep respirations are more difficult to carry on. The quality of the air has much to do with the depth of respiration; the purer the air, the deeper we breathe, and vice versa. Superficial respiration stands in direct causal relation to the development of pulmonary tuberculosis. Although respiration is automatic, much can be done to insure its proper performance. No apparatus is necessary to practice pulmonary gymnastics. Breathing should be nasal, full and slow, without using the accessory muscles of respiration. To begin with, it should be practiced either at the open window or in the open air, three times a day, 15 minutes each time. Many of the climatico-therapeutic measures for the cure of tuberculosis owe their benefits to the deepening of respiration, which increases not only the aeration of the lungs, but also the circulation. Furthermore, the movements of the diaphragm influence metabolism through their direct mechanic action on liver, stomach and spleen. Trunk musculature is also favorably affected. The author concludes that pulmonary gymnastics should be made a part of all courses in physical training.

A Study of Delirium.—W. Hirsch† defines delirium as a psychic state, characterized by an abolition of self-consciousness, by an incoherence in the chain of conceptions, and by the appearance of symptoms of sensory and motor irritation. The points of differential diagnosis between this and maniacal exaltation, those conditions of agitated confusion which arise from pathologic passion and affections, the so-called hallucinatory confusion, the different varieties of weak-mindedness and confusional dementia are discussed. The cases in which delirium arises in the course of an exciting disease are considered; these include the acute infectious dis-

*Deutsche Medicinische Wochenschrift, July 6, 1899.

†N. Y. Med. Jour., July 22, 1899.

eases and fever from whatever cause, acute poisoning, and the administration of large doses of salicylic acid, conium, etc.; acute delirium may also occur without any prodromata in erysipelas, acute articular rheumatism, typhoid fever and meningitis. Treatment of delirious conditions is determined by the underlying condition. Venesection is condemned without reserve; stimulation and regulation of the circulation is the indication to be met.

Quinine in Malaria.—G. DOCK.* In general, 15 grains of quinine is an average dose, but in severe or more obstinate forms 20 grains a day may be given as the normal dose; the best method is the administration of five grains three or four times a day; as to the time of administration, in a tertian or quartan intermittent, or any combination of these, quinine should be given in the decline of the paroxysm or not later than at the end of the apyrexia; the difference depends on the time the patient is seen and the diagnosis is made; it has been found very satisfactory to give the full dose in the form of the hydrochlorate in capsules, followed by 15 drops of dilute hydrochloric acid or give three five-grain capsules half an hour apart, with a small dose of the acid after each. If there is a rise of more than one degree after the first dose, or if the blood shows parasites, a second dose should be given, and if necessary even a third. After paroxysms have stopped it is advisable to give quinine at intervals of seven days, and in the more severe cases of five days. The question of quinine in malarial hemoglobinuria must be settled by careful clinical observation and experiment. It can be used cautiously in the meantime if parasites are present; a temporary increase in the severity of the symptoms should not cause alarm; it is not necessarily due to the drug; other methods of treatment must not be forgotten. The administration of quinine should be stopped as soon as the microscope shows this to be proper.

A Report of Two Cases of Typhoid Infection Without any Intestinal Lesion.—A. T. LARTIGAN.† The first case was a man, 51 years old, who died after an illness of about three weeks; anatomic diagnosis, after autopsy, was: typhoid fever without intestinal lesions; chronic interstitial nephritis; broncho-pneumonia, with edema of lungs; cloudy swelling of liver and kidneys, etc., etc. Complete microscopic and bacteriologic examination was made; bacteriologic diagnosis—bacillus typhosus. Blood obtained post-mortem was tested with a 24-hour-old bacillus growth of laboratory stock culture; in a dilution of one to thirty a positive reaction was obtained in twenty minutes; with a dilution of one to fifty, the agglutination and immobility were complete in forty-five minutes; with the typhoid bacillus from the case, in a dilution of one to fifty, the reaction was complete in forty minutes. The second case occurred in a woman, 31 years old, who died after an illness of about six weeks; there was acute splenic tumor, endometritis, typhoid and streptococcus infection of uterus, etc. Blood taken post-mortem gave positive Widal reaction; pure growths of the typhoid bacillus were isolated from the liver, gall-bladder and kidney. A complete report of the autopsy and results of microscopic and bacteriologic examinations in both cases are given.

*Jour Am. Med. Assn, July 27, 1899.
†N. Y. Med. Jour., July 29, 1899.

Generalized Vaccinia.—TYSON* reports a case in a girl, aged six months; vaccination with ivory points had been unsuccessful twice, so the vaccine lymph was used; five days later pustules began to appear on one arm, then spread to the back and other arm and legs. Pustules appeared in successive crops and were very numerous; there was but slight constitutional disturbance; the vaccination pustule became a large granulating ulcer, which healed slowly.

Quinin in Malaria—The Unsatisfactory Results of its Hypodermic Administration.—G. A. FACKLER† gives a brief review of twenty cases, showing the unreliableness of quinin administered hypodermically in malaria; the cases are divided into three classes: three in the first class, successfully treated by hypodermic injection of quinin; seven in the second class, successfully treated by quinine administered by the mouth; ten in the third class, treated ineffectually by quinin hypodermically, but effectually by substitution of quinin by the mouth. In only three out of thirteen cases, in which the remedy was introduced subcutaneously, was an abeyance of symptoms secured.

The Early Recognition and Management of Malignant Disease of the Digestive System.—M. EINHORN‡ maintains that malignant tumors, if discovered early enough, should be just as successfully removed from the digestive tract as elsewhere. The methods of diagnosis are still comparatively crude, and, as a rule, permit of recognition of a malignant affection at a stage when it has already progressed to a considerable extent. After referring to the investigations as to the etiology of cancer, the conditions under which the diagnosis of cancer of the different parts of the digestive apparatus is justifiable, are given; these are grouped under symptoms due to involvement of: (1) esophagus and cardia; (2) stomach and pylorus; (3) small and large intestine. A thorough examination of the physical state of the patient and a full knowledge of the history of the case will permit us to discover malignant disease

*Pediatrics, July 15, 1899.
†Jour. Amer. Med. Assn., July 29, 1899.
‡N. Y. Med. Jour., July 29, 1899.

comparatively early. Whenever the tumor is accessible for operation, and there is the slightest hope for curing the patient, complete extirpation of the growth should be performed. If the tumor is not accessible, or its entire removal is impossible, palliative operations should be undertaken in cases requiring them. Cases operated upon, as well as those without operation, require for their treatment and management a skillful physician, who is able to lessen suffering and nearly always to lengthen life, even under the most trying conditions.

Transient Glycosuria.—It is well known that after ingestion of certain poisons a glycosuria may occur, e. g., after overdoses of opium, chloroform, nitrate of amyl, crevase, etc. Raphael* reports a case of transient glycosuria after atropine poisoning, a condition not previously observed. Subsequent experiments by the author showed that glycosuria could be induced in rabbits by very large doses of atropine. A definite explanation is not offered, but the author considers it probable that we have to do with a hyperglycemia to explain the glycosuria.

Rumination.—Luther C. Peter† reports a case of rumination in a boy of nine. Neurotic family history, boy himself very nervous; habit has persisted for two years; he can regurgitate at will; examination of regurgitated matter showed presence of free hydrochloric acid one hour after food was eaten. Careful examination failed to reveal presence of any diverticulum or pouch into which food might have passed. Under a tonic sedative and suggestive line of treatment patient succeeded in overcoming the habit. Peter concludes that rumination is a neurosis, usually of the stomach, more frequent in males than in females; sometimes hereditary; usually associated with a profound neurasthenia; prognosis good.

NERVOUS AND MENTAL DISEASES.

The Administration of Atropine in Epilepsy.—F. L. Wachenheim‡ reports the good result in a case of epilepsy from the administration of large doses of atropine; the patient, a girl seven years old, had nocturnal convulsions and diurnal attacks for five years; treatment was begun with $\frac{1}{150}$ gr. of atropine sulphate and ten grains of potassium bromide three times a day; later the atropine was pushed and the bromide reduced; when the dose of atropine reached $\frac{1}{50}$ gr. three times a day, the attacks suddenly ceased. Three months later symptoms of poisoning appeared, there having been no seizure of any sort for eighteen days; the medication was reduced to $\frac{1}{65}$ gr. of atropine sulphate and two grains of bromide three times a day; four weeks later another reduction was made and this method continued till the medication consisted of $\frac{1}{200}$ gr. of atropine and five grains of bromide given once daily; then on alternate days, weekly, and finally very irregularly. At first there was a slight relapse of a few attacks when the dose was reduced. She remained free from seizures for the past six months; if not absolutely cured, the case is under perfect control. Neither the bromides nor atropine can in any way meet the causal indications of epilepsy, but if the disease depends on a passing intoxication, these drugs will suspend the destructive action of the seizures, until the *materia peccans* has ceased to act, while if there is a permanent cause the treatment will be at best only palliative.

The Exercise Treatment in Tabes Dorsalis.—A. Wiener* reports the results of treatment of patients suffering from tabes dorsalis by compensatory gymnastics; he believes that by this method patients can be so greatly benefitted that they have apparently recovered their normal gait. These cases are cited in detail, showing the marked improvement obtained. The exercise is practiced for the purpose of helping the patients to learn to co-ordinate properly, to lose their uncertainty, and again gain confidence in themselves. No complicated apparatus was employed; the patients were taught to perform various exercises while lying flat upon the back, at first with eyes open and then with their eyes shut. Each case suggests to the physician what movements should be employed; when the patient becomes adept in performing the exercises while lying down, he performs others while sitting on a chair; later he learns to stand and walk and to perform more complicated movements. The exercises should be under the control of a competent observer, and the improvement should be called to the patient's attention. The good effect of this exercise treatment of tabes can be explained only on the theory of the sensory origin of ataxia. The good results so far shown warrant a thorough trial of the method in all suitable cases.

A Case of Brain Tumor.—Jolly† demonstrated a case of brain tumor, which is of special interest, both from a surgical and from a localizing standpoint. The case is that of a man, aged 45 years; six months before entrance he was attacked with Jacksonian epilepsy, limited to the left side of the body, especially marked in the hand, arm and facial muscles; the leg was not at all affected; there was some sensory disturbance, a slight decrease of the touch and pressure sense. The tumor was localized on the right hemisphere, in the motor region, in the central convolution about the middle, and in regard to the sensory disturbances a little posterior. An operation was done and the skull opened and an in-

*Deutsche Medizinische Wochenschrift, July 13, 1899.
†Pediatrics, July 15, 1899.
‡N. Y. Med. Jour., July 22, 1899.

*N. Y. Med. Rec., July 22, 1899.
†Berl. klin. Wochenschrift, July 17, 1899.

filtrating glioma found. Owing to the large extent of the growth, no attempt at excision could be made. A tremendous hernia of the brain resulted. After the operation, although the paralysis still remained, the general condition was much improved. The patient lived 27 months after the operation. This case illustrates two important facts: first, the difficulty of diagnosing a circumscribed from a diffuse growth; secondly, that in the presence of symptoms depending upon tremendous increase of pressure in the brain, and where no other relief is possible, the mere opening of the skull will give relief.

The Importance of the Early Diagnosis in Locomotor Ataxia as Affected by the Newer Pathology.—W. T. PRITCHARD,* after giving the newer pathology of locomotor ataxia, based on the theory of the neurons, says that it is reasonable to assume that, if recognized with sufficient promptness in its early stages, before secondary sclerosis has occurred, the disease may not only be arrested, but an actual cure may be effected by means of appropriate treatment; hence the necessity for a thorough study of those symptoms, which from clinical experience or from *a priori* reasoning are known to be premonitory or prodromal of the developed classic disease. The significance of certain broad factors and of certain symptoms referable to certain nervous functions is discussed; the former includes the influence of age, sex, occupation and syphilis; in reaching a diagnosis of specific infection, proper weight should be given the occurrence of nocturnal headache, with insomnia; unusual and excessive fatigue, certain disturbances in special nervous functions, are of great premonitory significance. The premonitory symptoms are briefly discussed, with reference to the order of relative importance, viz.: disturbances of common sensation, ocular symptoms, genito-urinary symptoms, the reflexes, trophic symptoms, and the crises.

PATHOLOGY AND HISTOLOGY.

Concerning the Infectious Character of and the Relation Between Acute Articular Rheumatism and Chorea.—This important problem is treated by WESTPHAL, WASSERMANN and MALKOFF† by means of careful post-mortem and bacteriologic examination of some choreic patients who had a history of previous articular rheumatism and endocarditis. In two cases a fibrinous pleurisy and in one a parenchymatous nephritis were demonstrated post-mortem. The nervous system was normal, with the exception of edema of the brain and sinus thrombosis found in one case, and small hemorrhages in the cortex found in another. The most conclusive case was that of a young woman, aged nineteen, who was attacked in January with acute articular rheumatism. In February the first signs of choreic movements were observed. The chorea developed into the most severe type, stupor, fever and heart involvement. It is to be noted that with the increase in the choreic symptoms the rheumatic symptoms disappeared. The patient died in a collapse. Autopsy: hyperemia of the internal organs, endocarditic condition of the mitral, parenchymatous nephritis. From various organs specimens of blood were taken for bacteriologic examination. From these specimens Wassermann was enabled to isolate a micro-organism which had the peculiarity of causing multiple joint affections in animals with febrile symptoms. The organism is a streptococcus. The authors conclude as follows: It is not justifiable as yet to believe that this organism is the ordinary cause of acute rheumatic arthritis, but for the first time it has been possible to isolate, from a case of chorea post-rheumatica with fatal ending, a definite micro-organism which experimentally produced multiple joint affections in animals.

The Nature of the Xanthemata.—S. POLLITZER* sums up the conclusions arrived at as follows: (1) Xanthoma palpebrarum vulgare is not a neoplasm, it is a product of the degeneration of embryonically misplaced muscle fibres; (2) it bears no histologic relationship whatever to xanthoma tuberosum disseminatum; (3) the common xanthoma tuberosum and xanthoma diabeticorum are similar processes; (4) they are both connective tissue neoplasms, in which the relative proportion of fibrous tissue and connective-tissue cells varies in different cases. In both the cells undergo a fatty degeneration, resulting in the destruction of the cells and ultimately in the more or less complete disappearance of the nodule. The process is more diffuse and the degeneration more rapid in the diabetic form; (5) generalized xanthoma is an irritative process, whose cause must be sought in some systemic disturbance.

Susceptibility and Immunity.—D. H. BERGEY† defines immunity as that condition of the body in which the organism resists the invasion of disease-producing bacteria, or resists their growth and activity after they have gained an entrance; while susceptibility is the opposite condition, in which, instead of resistance, there is a passive inertia which allows the disease-producing bacteria to develop. Immunity is either natural or acquired; the latter can be divided into three classes—that induced by recovery from a previous attack of a disease, that induced by an attack of an allied disease, that induced by the injection of antitoxic substances. Susceptibility also may be spoken of as natural or acquired; the latter is the case when disease is contracted because of the lowered

*N. Y. Med. Jour., July 22, 1899.
†Berl. klin. Woch , July 17, 1899,

*N. Y. Med. Jour., July 15, 1899.
†Phila. Med. Jour., August 5, 1899.

tone of the organism through the influence of many factors which tend to destroy natural immunity. A satisfactory explanation of the phenomena of immunity in general cannot be given, but with regard to certain diseases we are in a position to state the conditions which underlie artificial and acquired immunity in some of the specific diseases. It is not probable that the form of immunity in the different diseases is as unlike as the diseases themselves are unlike in their nature and form of lesions. The theories of immunity are discussed, and of the three held at the present day it is evident that each is substantiated by both clinical observation and experimental results. The neutralizing effects of the antitoxins upon bactericidal toxins is only a relative one. The intimate action of the antitoxins is not definitely understood by anyone.

On the Question of the Formation of Sugar from Fat in Severe Cases of Diabetes. — EMIL ROSENQUIST* discusses the question of the possibility of the formation of sugar from fat. Seegan believed that it was possible, from his experiments. His results were, however, much criticised and the question was regarded as unsettled. The experiments in this work were done on patients suffering from severe diabetes. The patients were subjected to a strict albumen-fat diet. The conclusions are as follows: The amount of sugar found in the urine was greater than could have been expected from the amount of carbo-hydrates and albumen ingested; there must be then another source for the sugar, and that of necessity must be the fat. Therefore, it is to be regarded as proven, both by theoretic considerations and by these experiments, that sugar can be formed from fat.

SURGERY.

Appendiceal Pus.—Complication and Sequelæ. —J. B. DEAVER† points out the ravages produced by appendicitis with pus formation; the effects are often permanent and irremediable, unequaled by any other affection occurring within the abdominal cavity; these complications accentuate the necessity of early operation to usher in that prevention which is a cure. Peritonitis, secondary abscesses of the peritoneum, septic infective intoxication, abscess of the liver, fecal fistula, purulent pericarditis and purulent pleurisy are some of the most important and frequent complications mentioned.

First-Aid Package in Military Surgery.—N. SENN‡ emphasizes the following: (1) First-aid packages are indispensable on the battle-field in modern warfare. (2) The first-aid dressing must be sufficiently compact and light to be carried in the skirt of the uniform, or on the inner surface of the cartridge or sword belt, to be of no inconvenience to the soldier or in conflict with military regulations. (3) The Esmarch triangular bandage is of great value in the school of instruction, but in the first-aid package is inferior to the gauze bandage. (4) The package must contain in a waxed aseptic envelope an antiseptic powder, such as boro-salicylic powder, two sterilized safety-pins, wrapped in tin-foil, and between this package and the outside impermeable cover, two strips of adhesive plaster, 1 inch wide and 8 inches long. (5) The first-aid dressing must be applied as soon as possible after the receipt of the injury, a part of the field-service which can be safely entrusted to competent hospital-corps men. (6) The first-aid dressing, if employed behind the firing line, should be applied without removal of the clothing over the injured part, and fastened to the surface of the skin with strips of rubber adhesive plaster, the bandage being applied over and not under the clothing. (7) The first-aid dressing must be dry, and should remain so by dispensing with an impermeable cover over it, so as not to interfere with free evaporation of wound-secretion. (8) The first-aid dressing should not be disturbed unnecessarily, but any defects should be corrected at the first dressing-station.

Report of a Case of Abscess Posterior to the Appendix, Discharging Through the Umbilicus, and Causing Perityphlitis and General Peritonitis.—S. H. FRIEND* reports a case of abscess behind the appendix, in a girl 13 years old; twenty-three days previous the patient complained of nausea, intense pain in the abdomen; pain subsided on the application of hot compresses, and bowels were moved by enema; there was a discharge of pus from the umbilicus, but no symptoms of umbilical infection. The following day she was apparently well, and remained so till the present attack, which began with nausea, vomiting and intense pain around the umbilicus. Operation revealed the appendix adherent to the peritoneum, deep-red in color, not enlarged; an abscess cavity posterior to the appendix was the size of a walnut, its anterior wall very thin; there was incipient general peritonitis. Five days later the child died of peritonitis; post-mortem examination not permitted. Conclusions reached are: (1) that the abscess was caused by an infection, which came from the intestine, of a small vestige of the vitello-intestinal duct; (2) that the symptoms of the first attack were caused by a destruction of the anterior abscess-wall; (3) that then the appendix closed the destroyed wall, and so prevented a general infection; (4) that after the abscess-cavity refilled, the process of evacuation of pus followed the course of least resistance, viz., the pathway through the umbilicus; (5) that the final attack and the general infection were

*Berl. klin. Woch., July 10, 1899.
†Jour. Am. M. A., July 22, 1899.
‡Phila. Med. Jour., July 22, 1899.
*Phila. Med. Jour., July 22, 1899.

caused by the presence of adhesions which obliterated the patulous duct at the seat of the abscess.

On a Case of Tetanus Puerperalis Treated by Dural Infusion.—E. VON LEYDEN* describes a case of puerperal tetanus, treated by injections of tetanus toxins in the dura mater. This method has been but seldom used. The definite plausability for this method was brought out by Blumenthal, who found that in patients treated by tetanus antitoxin the blood would lose its toxic quality, but in spite of this the patient would die. He concluded then that the tetanus poison was to be found in other cells, most reasonably in the cells of the spinal cord. Therefore, in order that the tetanus antitoxin might act to full advantage it must be introduced into these cells. Roux and Rocall by this method were enabled to save 17 out of 25 guinea-pigs which had been inoculated by tetanus toxin. The case in question was that of a carpenter's wife, aged 29 years. Gravid at three months, she fell upon the floor of a carpenter-shop, where there was, in all likelihood, opportunity for tetanus infection. She aborted, and ten days afterward the first symptoms of tetanus appeared—pain in the back of the neck and difficulty in swallowing. On the sixteenth day a subdural injection of 10 cc. of the Behring's serum was made, and on the same day 5 cc. of Tizzoni's serum. The symptoms were so severe that an unfavorable prognosis was made. Trismus was present, convulsions, pulse 124, and high temperature. On the eighth day of the disease a further injection of 15 cc., and on the tenth day 20 cc. On the ninth day the first improvement was noted. The improvement continued until the condition of the patient gave promise of a possible recovery. Von Leyden believes that this case gives promise of further therapeutic utility.

A Case of Complete Dislocation of the Patellæ.—J. E. COURTNEY† found complete outward dislocation of the patellæ in a woman seventy-four years old; they rested on the outer condyles of the femur, and with the legs fixed could be partially pushed back into their nominal position, but immediately settled into the new position. The patient received an injury when fourteen years old; the ligaments were stretched, and their attachments so much strained that reduction could not be maintained; she was soon able to move about, and was only stiff in rising or sitting, and was a trifle shuffling in gait. The patient died of senility; with the joints opened and the patellæ turned down, it could be seen that they rested upon and had worn articular surfaces in the condyles, the one on the right knee impinging upon and slightly sharing the articular surface belonging to the tibia.

*Berl. klin. Woch., July 17, 1899.
†N. Y. Med. Rec., July 29, 1899.

The "Tobacco-Pouch" Suture. — QUERVEIN* maintains that this form of suture is but little used at present, and with no distinct indications. The author has made the attempt to bring it into general use, as a means of closing the peritoneum, in the belief that we can thus avoid the adhesion of abdominal viscera to the line of incision. Trials on the cadaver have shown the "tobacco-pouch" to be more resistant than a Lambert stitch. Edges of the wound must be carefully tucked in before an opening in stomach, gall-bladder, etc., can be closed—the opposite holds good in closing the abdomen.

The article is neatly brought to a close with the hope that other surgeons will try the method before passing judgment on it.

Cerebral Abscess in a Child Three Months Old.—W. J. DOYLE† reports a case in which the cause remained unknown; there was pronounced swelling at the anterior fontanelle, distinct fluctuation and pressure; temperature, 104.5°. An incision was made, but no pus found; the longitudinal sinus was penetrated, and hemorrhage was so profuse and persistent that the wound had to be packed; forty-eight hours later the dressing was removed; hemorrhage had ceased almost immediately, and no pus was present; wound was lightly packed with gauze, and on the next day, upon removing the packing, it was found saturated with a greenish, foul discharge; which welled up from the bottom of the wound. The wound was washed with solution of bichloride, and the child made an uneventful recovery, except for erysipelas of the head and face, which followed the usual course of a mild attack. The cause and location of the abscess remained a mystery.

The Esophagus—Cicatricial Stricture Thereof—Its Treatment.—W. J. MAYO‡, in summing up this subject, formulates the following conclusions: (1) Systematic sounding should be commenced in from two to four weeks after the swallowing of a caustic substance. (2) Should the traumatism be severe, immediate gastrostomy will lessen infection and hasten cicatrization, sounding being carried on as before. (3) Non-dilatable strictures in the vicinity of the cricoid cartilage should be divided by external esophagotomy. (4) Stricture above the arch of the aorta may be safely cut by a combined internal and external esophagotomy. (5) Dense thoracic strictures are best dilated by Ochsner's method, and, if necessary, divided by Abbe's string saw. (6) Impassible strictures should be treated by retrograde dilatation. (7) A dilated stricture should be occasionally sounded for years, if not for life.

*Centralblatt für Chirurgie.
†N. Y. Med. Jour., July 29, 1899.
‡Jour. Am. M. A., July 29, 1899.

Practical Therapeutics.

Liquid Air: Its Application in Medicine and Surgery —A. C. White* found that the extreme cold of liquid air, 312° F. below zero, did not kill the germs of typhoid, anthrax or diphtheria. If a spray of liquid air is applied to the skin the part at once becomes anemic, perfectly white and colorless; it completely anesthetizes the part without freezing it solid if applied for only a few seconds; there is absence of hemorrhage during operation, enabling the operator to apply a dressing before bleeding sets in, the dressing then being sufficient to stop any oozing. It is better to apply the liquid air intermittently while the operator is working than to try to freeze the part so that it will remain senseless for any length of time. Nothing else will so quickly and with as little pain clear up the edges and stimulate the granulations of varicose ulcers as liquid air, properly applied; the applications should not be so frequent as to break down the new granulations; one application to a chancroid suffices. It is of special service in opening abscesses, bubo and carbuncle, and in the early stage one thorough freezing will abort them. In herpes zoster, sciatica, intercostal neuralgia, permanent relief resulted by applying the liquid to the spinal end of the affected nerve. Brilliant results were obtained in a case of lupus erythematosa. When it is desired to remove some tissue, as a navus or wart, a cotton swab dipped in the liquid is applied to the part, and destruction of the part results. There is reason to hope that liquid air will prove to be a therapeutic agent which will remove many obstinate superficial lesions of the body.

External Applications in Neuralgia.—A valuable remedy in the treatment of neuralgia is made by mixing together one drachm each of camphor, chloral and menthol. This forms a thick, syrupy liquid, which should be painted along the course of the painful nerve and over the painful points. It is a powerful local anesthetic and undoubtedly is absorbed, penetrating the epidermis readily. It may be renewed as often as the pain appears.

Local Applications in Acute Rheumatism.—A local application in the treatment of rheumatism is a mixture of salicylic acid, oil of turpentine and lanolin, of each, half an ounce, to which is added two ounces of lard. The value of local applications in acute rheumatism is questioned by many writers, but there is little doubt that stimulating ointments are of some value in relieving the pain and aiding absorption of inflammatory exudates. The salicylates have long enjoyed a well-merited reputation as local applications to chronically inflamed joints. The above formula combines the stimulating properties of turpentine with the salicylic acid. It should be applied freely over the affected joints, and over all a layer of absorbent cotton, and outside of this a sheet of rubber tissue to prevent evaporation. The salicylic acid in the above formula soon erodes the epidermis, and when its more superficial layers have separated the turpentine must be left out of the formula.

*N. Y. Med. Rec., July 22, 1899.

To Remove the Odor of Iodoform from the Hands.—Dr. Ricketts is authority for the statement that vinegar applied freely to the hands after they have been cleansed with soap and water will effectually remove the odor of iodoform.

Treatment of Hay Fever. — W. C. Hollopeter gives the following formulæ for the general treatment of hay fever:

℞ Sodium bicarbonate
Sodium borate ..... āā ℥iss.
Carbolic acid ..... ℥j.
Glycerin ..... ℥ij.
Rose water (25%) ..... q. s. Oj.
M. et. Sig. Teaspoonful to one ounce of warm water.

This is used thoroughly in both nostrils with a hand-ball atomizer, after which with a curved aluminum applicator or Harrison Allen's nasal cotton carrier, he very carefully swabs and scrubs every portion of the mucous membrane, being sure to reach between the turbinated bones and all around and over every slight prominence. Then he carefully dries the membrane with clean cotton and freely uses:

℞ Menthol ..... gr.x.
Oil of eucalyptus ..... ℥j.
Pulverized camphor ..... ℥ss.
Albolin ..... ℥ij.
Plug the nose for a few minutes to retain the oily application.

The Therapeutic Value of Sanguiferrin.—That sanguiferrin is composed principally of the strengthening principles of the blood may be easily demonstrated by a microscopic examination. This will reveal a large number of leucocytes and erythrocytes, ordinarily known as white and red blood corpuscles. The preparation is so made that these elements preponderate in large numbers, and, as is well known, they are not only easily assimilable, but act directly on the tissues. The nucleins, which are present in appreciable quantities, also have an influence in promoting the general nutrition, as do the leucocytes and erythrocytes. Among those who have found the preparation of great value may be mentioned Dr. Otto Sutter, as a tissue builder; Dr. Waldo Briggs, to improve digestion and assimilation; Dr. J. R. Crosswhite, in convalescence from typhoid and other slow fevers; Dr. P. C. Lane, for malnutrition, and also in one case of stricture of the esophagus of tuberculous origin, where there was difficulty in swallowing; Dr W. C. Abbott, for anemia, chlorosis and wasting diseases.

Book Reviews

Warner's Pocket Medical Dictionary.

Warner's Pocket Medical Dictionary is an up-to-date work in every sense of the word. The latest medical terms have all been added; 10,400 words, terms and phrases are spelled, pronounced, and defined. The definitions are concise and comprehensive. Type bold and easily readable. Paper and binding neat and especially serviceable. Bound in flexible leather, round corners, colored edges. Complete tables of arteries (6 pages), bacilli, spirilli, streptococci, micrococci, bacteria (11 pages), muscles (24 pages), nerves (12 pages), dose table (14 pages). This latter comprises a complete list of all drugs, with their doses arranged in apothecaries' measure and their metric equivalents. Every one of its 413 pages is well written and will prove a valuable addition to the library of quick reference books of any physician. It will be sent to any address upon receipt of 75c., stamps or money order. Address W. R. Warner & Co., Philadelphia.

Saunders Medical Hand-Atlas. Atlas of Diseases of the Skin, Including an Epitome of Pathology and Treatment. By Prof. Dr. Franz Mracek of Vienna. Authorized Translation from the German. Edited by Henry W. Stelwagon, M.D., Ph.D., Clinical Professor of Dermatology, Jefferson Medical College, Philadelphia, etc. With sixty-three colored plates and thirty-nine full-page half-tone illustrations. (W. B. Saunders, Philadelphia. 1899. $3.50).

This volume is the latest of the series of the atlases issued by Saunders, and is certainly up to the standard of excellence set by the preceding volumes of the series. The illustrations are very well executed, and the coloring remarkably accurate; they will serve as substitutes for clinical observation, as well as for comparison with cases often presented to the general practitioner, in which the diagnosis is not at once evident. An outline of treatment and pathology is very convenient for reference, and adds to the value of the atlas as an aid to the physician in general practice.

Progressive Medicine. A Quarterly Digest of Advances, Discoveries, and Improvements in the Medical and Surgical Sciences. Edited by HOBART AMORY HARE, M.D., Professor of Therapeutics and Materia Medica in the Jefferson Medical College of Philadelphia. Octavo, handsomely bound in cloth; 490 pages, 28 illustrations and 3 colored plates. (Lea Brothers & Co., Philadelphia and New York).

This work of some four hundred pages is devoted exclusively to the advancements made in surgery of head, neck and chest, diseases of children, pathology, infectious diseases, laryngology and rhinology, and otology. The articles have been contributed by men well known in the profession as devoting their life work to these special branches, which alone is sufficient to recommend the book. The author has struck a happy mean in the conception of his work. Although this volume embraces the progress in the before-mentioned branches, it is not written in such a form as to make it a compilation of abstracts. In this form it is especially to be recommended to the busy practitioner who desires to keep in touch with the latest investigations but has not sufficient time at his disposal to review a large number of journals.

Thoracic Resection for Tumors Growing from the Bony Wall of the Chest. By F. W. PARHAM, M.D. 1899. New Orleans.

The author presents a complete summation of the subject, including the history, classification, etiology, diagnosis, and methods of treatment. The work is most complete, is far more comprehensive and exhaustive than any similar publication in the English language.

The International Medical Annual, 1899. A Work of Reference for Medical Practitioners. Seventeenth Year. 700 pages. Price, $3.00. (E. B. Treat, New York).

As the Treat Annuals appear each year their usefulness becomes more manifest, and though in each the plan seems perfect, the slight modifications are undoubted improvements. This year special articles have been contributed by R. Norris Wolfenden, Seneca D. Powell, Robert Jones, A. H. Tubby, F. de Havilland Hall, W. A. Purrington, and S. G. Shattock. The Dictionary of New Treatment, which constitutes Part III. of the work, is strictly up to date and is indispensable to the busy practitioner who desires to keep abreast with the times.

A RECENT meeting at the Waldorf-Astoria, in New York, had for its object the remedies to be used in checking the incompetent treatment of the sick by Christian scientists, faith healers, etc. The meeting was under the auspices of the Medical and Legal Relief Society, and is said to have been something of a farce. The Christian Scientists were present in force and insisted upon doing most of the talking. They "packed" the meeting. A New York alderman has drafted an ordinance leveled at these practices. It was discussed at this meeting and was pronounced most defective; it is said to be a law against giving bad advice. The legal regulation of this sort of practice will, we think, be found very difficult. Notwithstanding this, some great medical editors have formally pronounced that "liberty" as expressed in the Constitution does not permit one to employ other people to pray his diseases away. We think it will be difficult to enforce a law compelling every one to employ a legally-qualified practitioner when sick.